DOCKET NO. D-1998-027-4

DELAWARE RIVER BASIN COMMISSION

Nestlé Waters North America Inc.
Spring Water Withdrawal Renewal
Lynn Township, Lehigh County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted by Nestlé Waters North America Inc. (NWNA) to the Delaware River Basin Commission (DRBC or Commission) on March 8, 2012, for renewal of an allocation of spring water previously approved by the DRBC on March 12, 2008 (Application). The Pennsylvania Department of Environmental Protection (PADEP) approved Hoffman Springs Nos. 1 and 2 as public water supply sources on October 8, 1986, (Permit No. 1396119), and Spring No. 3 on June 22, 1989 (Permit No. 3986504-A1). On April 4, 1996, PADEP approved Public Water Supply Permit No. 3396420 for operation of the docket holder's bottled water system, including treatment facilities and several sources including the project springs. On May 5, 2006, PADEP issued an amendment to Permit No. 3396420 authorizing construction to modify the Hoffman Springs facilities consistent with Docket D-98-27-2. On June 2, 2008, PADEP approved the Mattos Catchment No. 1 spring source for augmentation to Ontelaunee Creek and modification of the Hoffman Springs facilities in Permit No. 3396420.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Lehigh Valley Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on December 5, 2012.

A. DESCRIPTION

1. Purpose. The purpose of this project is to renew the allocation to withdraw up to 9.3 million gallons per month (mgm) or an average of 300,000 gallons per day (gpd) of water from the docket holder's three existing spring water sources (Hoffman Springs Nos. 1, 2, and 3) to supply its existing bottled water operations and to renew the allocation to withdraw up to 2.015 mgm or an average of 65,000 gpd of water from the spring source known as the Mattos Catchment No. 1 used to augment flow in Ontelaunee Creek.

2. Location. The project springs are located in the Ontelaunee Creek Watershed in Lynn Township, Lehigh County, Pennsylvania. Ontelaunee Creek near the project withdrawals is designated by the PADEP as Exceptional Value (EV), supporting Cold Water and Migratory Fishes (CWF, MF). The springs were formed by variations in the shallow glacial till and colluvium composing the surficial geological formation which allows groundwater to migrate upward from underlying sand layers under artesian head. The springs occur within areas underlain by the Martinsburg Formation but do not principally emanate from this bedrock source but rather from the surficial geological formation.

Specific location information has been withheld for security reasons.

3. Area Served. Raw water from Hoffman springs is transported via tanker truck to the NWNA bottling plant in Upper Macungie Township (Breinigsville), Lehigh County, Pennsylvania, for filtration, processing, and packaging for distribution. NWNA also occasionally supplies a limited amount of water, without charge, from the Hoffman spring water loadout station to the New Tripoli Volunteer Fire Company and the Lynnport Volunteer Fire Company for emergency firefighting and filling residential or municipal pools. The water provided is included within the docket holder's withdrawal limitations as specified in Condition C.II.d. in the Decision Section. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in the Decision section of this docket.

4. Physical features.

a. Design criteria. The Hoffman spring catchments passively collect spring water which is naturally discharged, and the Hoffman spring water is diverted to a loadout facility and transported to the NWNA bottling facility. Existing average and maximum water demands are 0.27 mgd and 0.30 mgd, respectively. The ten-year future projected maximum water demand is anticipated to be 0.30 mgd.

Withdrawals from the Mattos Catchment No. 1 are only used to augment the flow of Ontelaunee Creek when Ontelaunee Creek flows are less than a trigger flow of 0.6 cubic feet per second (cfs) and to assist the docket holder to meet the existing passby flow in Ontelaunee Creek of 0.3 cfs. Any excess water in the Mattos Catchment No. 1 is discharged into the Henry West Stream. Up to 65,000 gpd of water may be used to supplement Ontelaunee Creek when the flow in the Henry West Stream exceeds 0.3 cfs. The allowable withdrawal and transfer of water from Mattos Catchment No. 1 will be reduced to 50,000 gpd when the flow in the Henry West Stream equals or is less than 0.3 cfs.

b. Facilities. The existing project spring catchments have the following characteristics:

CATCHMENT NO.	DEPTH	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY	YEAR CONSTRUCTED
Hoffman Spring 1	10’	9’ / 72”	gravity	1997
Hoffman Spring 2	12’	11’ / 72”	gravity	1997
Hoffman Spring 3	8’	7’ / 66”	gravity	1989
Mattos Spring 1	23’	21’ / 72”	gravity	2006

All spring withdrawals are metered in accordance with the DRBC-approved Operation and Monitoring Plan.

Prior to entering the distribution system, the water will be treated by micro-particulate filtration and ultraviolet light disinfection.

The project facilities are not subject to flooding.

The water system is not presently interconnected with any other water system.

The three Hoffman spring catchments are each covered stainless steel catchments equipped with watertight access hatches. Each Hoffman spring catchment has a single outlet pipe and a single overflow pipe. Water flows into each of the Hoffman spring catchment structures under the force of gravity from the underground stratum feeding the natural spring vents. Spring water entering the three Hoffman spring catchments drains by gravity through individual pipelines to a common distribution box, where they combine prior to being pumped through a single pipeline to the tanker truck loadout station. Those spring flows that are in excess of withdrawals for bottling purposes are discharged either through the individual spring catchment overflow pipelines or through a bypass pipeline in the valve box prior to the spring source waters mixing in the distribution box. The valve box bypass pipeline discharges to an intermittent stream referred to as the West Stream. The West Stream joins the Ontelaunee Creek near the loadout station. At the loadout station, spring water from the Hoffman spring catchments passes through ultraviolet light disinfection and cartridge filtration prior to being stored for loading and transportation. At the Hoffman loadout station, on-site storage consists of three 27,000-gallon stainless steel storage tanks.

The Mattos spring catchment has a construction similar to other Hoffman spring catchments. Spring water collected in the Mattos spring catchment is conveyed by gravity to a valve pit. Spring water to be utilized for augmentation of Ontelaunee Creek is then conveyed via a pipeline which crosses under State Route 309 to the Hoffman property and discharged into Ontelaunee Creek at a location above the existing Hoffman Flume 2. Augmentation water is conveyed from the Mattos property to the Hoffman property by gravity, If necessary in the future, NWNA may install and utilize a booster pumping facility installed on the Mattos property below the valve pit if necessary to effectively convey the water to the Hoffman property. Excess water collected from the Mattos spring catchment is conveyed from the valve box via a pipeline to discharge into the Henry West Stream at a point approximately 850 feet upstream of flume MSFL 3.

Hoffman spring water is transported for further processing at the NWNA bottling facility, known as the Breinigsville Plant, which is located on Nestle Way in Upper Macungie Township, Lehigh County, near the City of Allentown. At that plant, nine raw water silos store water from the project springs and other sources.

d. Cost. There are no costs associated with the renewal of this existing project.

B. FINDINGS

Background

NWNA's former DRBC Docket No. D-98-27 was approved on June 24, 1998 for a period of 5 years, and approved a withdrawal of up to 9.0 million gallons per 30 days (mg/30 days) of water from the applicant's three existing spring water sources (Hoffman Springs Nos. 1, 2, and 3) to supply its existing bottled water operation. Based upon the docket holder's initial analysis of the spring yields during differing precipitation events and withdrawal rates, the three springs were estimated to reliably supply a combined flow of 475,000 gpd; Spring No. 1 at a minimum yield of 86,400 gpd, Spring No. 2 at a minimum yield of 115,200 gpd, and Spring No. 3 at 273,600 gpd. Although the combined flow from the three springs may exceed the approved allocation of up to 9.3 mgm, the total combined approved withdrawal is limited to 300,000 gpd on average over any month, subject to the passby flow requirement in Condition C.II.g. in the Decision Section.

The development of an Ontelaunee Creek biomonitoring plan was required as a condition of Docket No. D-98-27. Implementation of the monitoring plan was required to further develop hydrologic data for spring discharge and stream flow and provide information on any potential adverse environmental impacts. The docket holder was required, by the 1998 docket, to conduct a site specific study to quantify habitat loss caused by the withdrawal and to cooperate with the Pennsylvania Fish and Boat Commission (PFBC) in running the Pennsylvania Instream Flow Model (PIFM) using a reference gaging station as a comparison. The study also facilitated a comparison of estimated changes in habitat with fish population responses over time. The habitat modeling exercise involved the use of the Physical Habitat Simulation System (PHABSIM), which was developed by the U.S. Fish and Wildlife Service to quantitatively estimate changes in physical habitat as a function of flow. PHABSIM has been a primary instream flow tool used by fisheries biologists engaged in instream flow studies. The results of the various modeling efforts indicated that without mitigation the habitat loss was greater than what PFBC would recommend for protection of aquatic life.

PADEP issued a Memorandum dated February 26, 2004 and entitled "Existing Use; Maiden Creek Tributaries" which recommended, under 25 Pa. Code § 93.4c(a)(1), that the "existing use" of upper reaches of Ontelaunee Creek in the vicinity of the Hoffman Springs NWNA withdrawal is "exceptional value".

The PFBC took action at its September 27, 2005 meeting to designate the Unnamed Tributary to Ontelaunee Creek, described in this docket as the "Mattos" or "Henry" tributary, to

the Class A Wild Trout Waters List pursuant to 58 Pa. Code §57.8a. PFBC conducted trout population surveys in 2004 and 2005. The tributary was designated a Class A Wild Brook Trout Water from its mouth to the source, a distance of 0.85 miles.

On December 7, 2005 the Commission approved Docket No. D-98-27-2 which increased the Ontelaunee Creek passby flow to 0.3 cfs and provided that no withdrawal can be made from Hoffman Springs when stream flow is 0.3 cfs or less. The 2005 docket also made adjustments to the monitoring requirements.

On March 12, 2008 the DRBC renewed the project approval in Docket No. D-98-27-3 with the addition of the Mattos Spring 1 Catchment as an augmentation source for streamflow in Ontelaunee Creek under moderate-to low-flow conditions. The docket holder had conducted ongoing monitoring over the years 1998 to 2008 and had revised the initial estimation of spring yield. The three springs were then estimated to reliably supply a combined flow of 478,080 gpd; Spring No. 1 at a typical annual yield of 105,120 gpd, Spring No. 2 at a typical annual yield of 122,400 gpd, and Spring No. 3 at a typical annual yield of 250,560 gpd. The actual combined flow from the three Hoffman springs had been observed to vary from approximately 396,000 gpd during very dry years to approximately 576,000 gpd during wet years.

On July 25, 2008, the Executive Director of the DRBC approved the Operation and Monitoring Plan (O&M Plan) submitted by NWNA for the Hoffman and Mattos Spring withdrawals as required by Docket No. D-98-27-3. The O&M Plan includes the details of the operation of the spring withdrawals, spring flow measurements, flow augmentation, hydrologic monitoring, biomonitoring, wetland monitoring, pass-by flow compliance, drought emergency actions, and reporting.

NWNA has complied with the O&M Plan and all conditions of their former and current dockets and has submitted all required reports to the DRBC, PFBC and PADEP, all of which have been reviewed by the DRBC, PFBC and PADEP.

Mattos Spring Flow Augmentation to Ontelaunee Creek

The Mattos Catchment No. 1 can convey water to Ontelaunee Creek to augment Ontelaunee Creek flows when combined flows at Flumes Nos. 2 and 3 drop below a trigger level of 0.6 cfs and also to allow the docket holder to meet the aforementioned passby flow in Ontelaunee Creek. The docket holder may convey up to 2.015 mgm (65,000 gpd) of water to supplement Ontelaunee Creek while the flow in the Henry West Stream exceeds 0.3 cfs. The docket holder cannot convey more than 1.55 mgm (50,000 gpd) when the flow in the Henry West Stream is equal to or less than 0.3 cfs. Specific details of Mattos Spring Augmentation Flows are described in Condition C.II.e. and f. in the Decision Section.

Passby Flow

The docket holder shall continuously monitor the Ontelaunee West Stream and the Ontelaunee East Stream at Flumes Nos. 2 and 3, respectively. Whenever the combined streamflow as measured in the flumes is equal to or less than 0.3 cfs (0.19 mgd), no withdrawal from Hoffman Springs 1, 2 or 3 shall be made for water bottling purposes or filling of municipal

and residential swimming pools, and withdrawals shall only be for emergency firefighting purposes as described in Condition C.II.g. in the Decision Section.

O&M Plan

During the term of this docket, NWNA is required to continue to implement the hydrologic and biologic monitoring and reporting program detailed in the O&M Plan approved by the Executive Director on July 25, 2008 and modified herein as described in Condition C.II.h. in the Decision Section.

The DRBC estimates that the project withdrawals, used for the purpose of bottled water supply, result in a consumptive use of 100 percent of the total water use. Water withdrawals from the Mattos Catchment No. 1, used to augment flow in Ontelaunee Creek, are estimated to result in no consumptive use. The DRBC definition of consumptive use is defined in Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*.

The project is designed to conform to the requirements of the Water Code and Water Quality Regulations of the DRBC.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

C. DECISION

I. Effective on the approval date for Docket No. D-1998-027-4 below, Docket No. D-1998-027-3 is terminated and replaced by Docket No. D-1998-027-4.

II. The project and appurtenant facilities as described in the Section A "Physical features" are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its Public Water Supply permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's. The docket holder shall register with and report to the PADEP all surface and ground water sources described in this docket in accordance with the Pennsylvania Regulations (Title 25 - Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning).

b. The spring catchments and operational records shall be available at all times for inspection by the DRBC.

c. The spring catchments shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

d. During any month, the combined withdrawal from Hoffman Springs Nos. 1, 2 and 3 shall not exceed 9.3 million gallons (300,000 gpd).

e. (i) During any day when the flow in the Henry West Stream, as measured at Flume MSFL 3, is greater than 0.3 cfs, the withdrawal from Mattos Catchment No. 1 for transfer to augment the flow of Ontelaunee Creek shall not exceed 65,000 gpd. During any day when the flow in the Henry West Stream, as measured at Flume MSFL 3, is equal to or less than 0.3 cfs, the withdrawal from Mattos Catchment No. 1 for transfer to augment the flow of Ontelaunee Creek shall not exceed 50,000 gpd. For purposes of determining compliance with this condition, the flow of Henry West Stream at Flume MSFL 3 shall be observed once per day as specified in the O&M Plan.

(ii) Water from Mattos Catchment No. 1 will be conveyed to Ontelaunee Creek when the combined flow in the Ontelaunee Creek, as measured at Hoffman Flumes 2 and 3, is equal to or less than 0.6 cfs (± 0.05 cfs). No withdrawal from Mattos Catchment No. 1 shall be made for purposes of augmenting flow in Ontelaunee Creek when withdrawal from Hoffman Springs Nos. 1, 2 and 3 has ceased in accordance with Condition C.II.g, below and in accordance with Condition C.II.f, below, water collected in Mattos Catchment No. 1 shall be discharged to the Henry West Stream. Flow augmentation from Mattos Catchment No. 1 to Ontelaunee Creek will resume when the hydrological conditions, combined with the augmentation from Mattos Catchment No. 1, can sustain a flow in Ontelaunee Creek, as measured at Hoffman Flumes Nos. 2 and 3, equal to or greater than 0.3 cfs. Flow augmentation from Mattos Catchment No. 1 to Ontelaunee Creek shall continue until hydrological conditions are again able to sustain a flow in the Ontelaunee Creek, as measured at Hoffman Flumes 2 and 3, without flow augmentation from Mattos Catchment No. 1, of greater than 0.6 (± 0.05 cfs).

(iii) The flow from the Mattos Catchment No. 1 shall be measured via a meter before the water enters the valve box. The water from Mattos Catchment No. 1 that is utilized to augment the flow of Ontelaunee Creek shall be measured both at the discharge side of the valve box (where the water enters the conveyance pipeline) and at or near the point of discharge into Ontelaunee Creek.

f. Water withdrawn from the Mattos Catchment No. 1 can only be used to supplement the Ontelaunee West Stream, and any excess spring water collected in Mattos Catchment No. 1 shall be discharged to the Henry West Stream.

g. The docket holder shall continuously monitor the Ontelaunee West Stream and the Ontelaunee East Stream at Flumes Nos. 2 and 3, respectively. Whenever the combined streamflow as measured in the flumes is equal to or less than 0.3 cfs (0.19 mgd), no withdrawal from Hoffman Springs 1, 2 or 3 shall be made for water bottling purposes or filling of municipal and residential swimming pools, and withdrawal shall only be for emergency firefighting purposes.

h. NWNA is required to continue to implement the hydrologic and biologic monitoring and reporting program in the West Stream, East Stream and upper mainstem of Ontelaunee Creek, the drought emergency plan, and all other aspects described in the Operation Plan for Hoffman Springs (O&M Plan) approved by the Executive Director on July 25, 2008. The Executive Director may modify the O&M Plan if the results indicate that a change is required or appropriate.

i. NWNA will continue to prepare and submit to the DRBC, PADEP and PFBC, an annual hydrologic monitoring report and annual report on the results of the aquatic biologic monitoring program performed at Mattos and Hoffman properties in accordance with the approved O&M Plan. Such annual reports shall be submitted on or before April 30 of each calendar year, summarizing the observations and results of monitoring conducted in the previous calendar year.

j. NWNA, in cooperation with DRBC, shall convene and participate in an annual consultation meeting or conference call involving representatives of DRBC, PADEP, PFBC, and NWNA's consultant(s) for the purpose of reviewing the results of the hydrologic and biologic monitoring program, and discussing any related issues and concerns relating to operation of the project, the hydrogeologic system, or aquatic biota.

k. Sound practices of excavation, backfill and reseeding shall be followed to minimize erosion and deposition of sediment in streams from any new facilities or repair related construction.

l. The project withdrawals shall be metered with an automatic continuous recording device that measures to within 5 percent of actual flow. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted if maintenance of the 5 percent performance is not technically feasible or economically practicable. A record of daily withdrawals shall be maintained, and monthly totals shall be reported to the PADEP annually and shall be available at any time to the Commission if requested by the Executive Director.

m. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

n. The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this docket. Any transport of raw water from the Hoffman Springs to a location other than the (i) Breinigsville bottling plant or (ii) uses by the volunteer fire companies, as described in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact*. Any conveyance of water from the Mattos Catchment No. 1 to a location other than the Hoffman property or the Henry West Stream is subject to DRBC review and approval in accordance with Section 3.8 of the Compact. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact*.

o. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and

approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

p. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder in order to insure the proper control, use and management of the water resources of the Basin.

q. If the monitoring required herein, or any other data or information demonstrates that the operation of this project significantly affects or interferes with any domestic or other existing uses of ground or surface water, or if the docket holder receives a complaint by any existing ground or surface water users within the zone of influence of the withdrawal, the docket holder shall immediately notify the Executive Director of any complaints by any ground or surface users within the zone of influence of the withdrawal, and unless excused by the Executive Director, shall investigate such complaints. The docket holder should direct phone call notifications of potential well or surface water interference or complaints of interference to the DRBC Project Review Section at 609-883-9500, extension 216. Oral notification must always be followed up in writing directed to the Executive Director. In addition, the docket holder shall provide written notification to all potentially impacted users of wells or surface water supplies of the docket holder's responsibilities under this condition. Any ground or surface water user which is substantially adversely affected, rendered dry or otherwise diminished as a result of the docket holder's project withdrawal, shall be repaired, replaced or otherwise mitigated at the expense of the docket holder. A report of investigation and/or mitigation plan prepared by a hydrologist shall be submitted to the Executive Director as soon as practicable. The Executive Director shall make the final determination regarding the validity of such complaints, the scope or sufficiency of such investigations, and the extent of appropriate mitigation measures, if required.

r. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

s. For the duration of any drought emergency declared by either Pennsylvania or the Commission, water service or use by the docket holder pursuant to this approval shall be subject to the prohibition of those nonessential uses specified by the Governor of Pennsylvania, the Pennsylvania Emergency Management Council, PADEP, or the Commonwealth Drought Coordinator to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.

t. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

u. The docket holder shall continue to pay for water use in accordance with the provisions of Resolution No. 74-6, as amended.

BY THE COMMISSION

APPROVAL DATE:

EXPIRATION DATE: December 5, 2022